Remarks

Claims 1, 9 and 17 have been amended. Claims 4 and 12 have been deleted without prejudice.

The Examiner has rejected applicants' claims 1-3, 8-11 and 16-18 under 35 USC § 103(a) as being unpatentable over the Lipson, et al. (U.S. 6,463,436) patent taken in view of the Kasson (U.S. 5,793,885) patent. The Examiner has further rejected applicants' claims 4, 7, 12 and 15 under 35 USC §103(a) as being unpatentable over the Lipson, et al. patent taken in view of the Kasson patent, in further view of the Shiiyama (U.S. 6,411,291) patent. With respect to applicants claims, as amended, these rejections are respectfully traversed.

Applicants' independent claims 1, 9 and 17 have been amended. These claims recite an apparatus, method and storage medium in which an image is retrieved from a storage means which stores a plurality of images and image features of each of the plurality of images in a form correlated with the images and in which the image features of each image include image features of tiles obtained by dividing an image into a predetermined number of tiles. A feature calculation process is carried out which divides a retrieval source image into the predetermined number of tiles and calculates image features for every tile.

Image features are acquired by generating image features by multiplying each of the image features of the plurality of tiles that have been stored in the storage means, by a constant, and acquiring plural sets of image features regarding one image by varying the constant. Image retrieval is then performed by calculating degree of similarity between each of the plurality of images and the retrieval source image based upon the plural sets of image features acquired and the image features calculated in the feature calculation process, wherein the retrieval process calculates degree of similarity between each image that has been stored

in the storage means and the retrieval-source image using the plural sets of image features acquired, and adopts maximum degree of similarity as the degree of similarity between a particular image and the retrieval-source image.

Independent apparatus, method and control program claims 8, 16 and 18 are directed to an image retrieval process similar to the image retrieval process of independent claims 1, 9 and 17. In the case of claim 8, 16 and 18, however, new mage features are acquired by multiplying image features by a constant which varies for every tile.

Such constructions are not taught or suggested by the cited art of record. The Examiner has acknowledged that the Lipson, et al. patent does not teach or suggest the invention of applicants' independent claims and, in particular, the process of acquiring image features by multiplying image features of stored image by a constant which is varied. However, the Examiner argues that this feature is taught by the Kasson patent and that it would be straightforward for a skilled artisan to incorporate this feature into the Lipson, et al. patent to result in applicants' invention. In particular, the Examiner argues as follows:

> "On the other hand, Kasson discloses: acquisition means for generating image features by multiplying the image features that have been stored in said storage means, by a constant and acquiring plural sets of image features regarding one image by varying the constant (col. 10, lines 13-35, Kasson). Thus, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include step for generating image features by multiplying the image features that have been stored in said storage means, by a constant and acquiring plural sets of image features regarding one image by varying the constant in the system of Lipson as taught by Kasson. The motivation being to enable the system to carry hue angles that closely correspond to those of the original image so the chroma of the image increases where the filtered image is brightened and decreases where the filtered image is darkened (col. 10, lines 1-42, Kasson)."

Applicants disagree. In the first place, applicants submit that the differences in the problems being solved and the solutions realized in the Lipson, et al. and the Kasson patents are such that a skilled artisan would not look to modify the Lipson, et al. patent based on the Kasson patent. In particular, the Lipson, et al. patent is directed to the problem of information search and retrieval and solves the problem by using a search engine, an image analyzer and feature modules. The features modules define particular regions of an image and particular measurements to make on pixels in the region and on neighboring pixels in neighboring regions and communicate the resultant measurement information to the image analyzer. The Kasson patent, on the other hand, deals with the entirely different problem of spatial filtering of images represented by electronic signals that are compatible with a computer and solves this problem by applying a high pass filter to the image. In the Kasson patent the following processes are carried out: extracting signals representative of luminance of an image, filtering the image based on the extracted signals, dividing the filtered signals by the original luminance signal to yield quotient signals and finally multiplying the quotient signals by the components of the input image to provide a filtered output image.

The Lipson, et al. patent thus concerns searching and retrieval of images and uses search engines and other elements to accomplish this. The Kasson patent, on the other hand, deals with spatial filtering of images and uses a particular filtering to accomplish this. The fact that Kasson patent teaches certain advantages of the disclosed filtering system, i.e., realizing desired chroma of the resultant image, simply does not provide a motivation to a skilled artisan to use the Kasson apparatus for the searching and retrieval of images. The Examiner's attempted combination of these patents thus appears motivated not by the teachings of the patents themselves, but by the Examiner's desire to meet the terms of

applicants' claims. The Examiner's rejection based on the combination of these references should, therefore be withdrawn.

Moreover, even if the references could somehow be viewed together, it is not believed that the passages cited by the Examiner teach or suggest "acquisition means for generating image features by multiplying the image features that have been stored in said storage means, by a constant and acquiring plural sets of image features regarding one image by varying the constant," as the Examiner has argued. More particularly, the cited passage at column 10, lines 13-35, of the Kasson patent mentions nothing about acquiring plural sets of image features regarding one image by varying a constant. Instead, the Kasson patent only mentions that the use of the invention "does not change the proportion of red, green, and blue coloring for each pixel, since the three color planes are all multiplied by the same amount for each pixel" and that "multiplying a linear representation by an original constant and then gamma-correcting the product produces the same results as multiplying a gamma-corrected representation by a different constant". These statements are not a teaching or suggestion of acquiring plural sets of image features regarding one image by varying a constant.

Applicants' independent claims 1, 8, 9, 16, 17 and 18, and their respective dependent claims, all of which recite such feature in one form or another thus are believed to patentably distinguish over the Lipson, et al. and Kasson patents taken alone or in combination. The Shiiyama patent adds nothing to the Lipson, et al. and Kasson patents to change this conclusion.

In view of the above, it is submitted that applicants' claims, as amended, patentably distinguish over the cited art of record. Accordingly, reconsideration of the claims is respectfully requested.

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Respectfully submitted,

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